Charles D. Baker
Governor

Karyn Polito
Lieutenant Governor

Marylou Sudders
Secretary

Monica Bharel, MD, MPH
Commissioner

Suicides in Massachusetts

2015

April 2018

Massachusetts Department of Public Health

Legislative Mandate

The following report is hereby issued pursuant to Section 232 of Chapter 111 of the Massachusetts General Laws as follows:

The department, in consultation with the executive office of public safety and security shall, subject to appropriation, collect, record and analyze data on all suicides in the commonwealth. Data collected for each incident shall include, to the extent possible and with respect to all applicable privacy protection laws, the following: (i) the means of the suicide; (ii) the source of the means of the suicide; (iii) the length of time between purchase of the means and the death of the decedent; (iv) the relationship of the owner of the means to the decedent; (v) whether the means was legally obtained and owned pursuant to the laws of the commonwealth; (vi) a record of past suicide attempts by the decedent; and (vii) a record of past mental health treatment of the decedent.

The department shall annually submit a report, which shall include aggregate data collected for the preceding calendar year and the department's analysis, with the clerks of the house of representatives and the senate and the executive office of public safety and security not later than December 31. Names, addresses or other identifying factors shall not be included.

The commissioner shall work in conjunction with the offices and agencies in custody of the data listed in this section to facilitate collection of the data and to ensure that data sharing mechanisms are in compliance with all applicable laws relating to privacy protection. Data collected and held by the department to complete the report pursuant to this section shall not be subject to section 10 of chapter 66 and clause Twenty-sixth of section 7 of chapter.

Executive Summary

Section 232 of Chapter 111 of the Massachusetts General Laws tasked the Massachusetts Department of Public Health (DPH) with collecting, recording and analyzing data on all suicides in the Commonwealth and submitting an annual report.

DPH analyzed data collected on suicides for 2015 and found the following:

- In 2015, 631 suicides occurred in Massachusetts. This number was greater than the number of deaths due to motor vehicles (N=306) and homicides (N=146) combined.
- In 2015, the rate of suicide in Massachusetts was 9.3/100,000 persons. This rate has increased an average of 2.6% per year since 2005. There were approximately 35% more suicides in 2015 than in 2005.
- The majority (74%) of suicide victims were male (n=468). However, rates for both males and females have increased since 2005. From 2005 to 2015, the rate of suicides increased 26% for males and 34% for females.
- The majority of suicides that occurred in 2015 were among individuals 45-64 years old (n=269, 43%).
- The most prevalent means of suicide for males were hanging/suffocation (51%) and firearm (22%), which combined accounted for 73% of male suicides.
- For females, the most prevalent means of suicide were hanging/suffocation (44%) and poisoning/overdose (35%), which combined accounted for 79% of female suicides.
- Males (n=103) accounted for 90% of firearm suicides (n=114). Handguns (N=85, 75%) were the most common type of firearm used in suicides.
- For poisoning suicides, opiates (n=40, 17%) and antidepressants (n=38, 17%) were the most common classes of drugs used.
- 31% of female suicide victims (n=51) and 12% of male suicide victims (n=58) were known to have a prior suicide attempt.
- 58% of female suicide victims (n=95) and 38% of male suicide victims (n=178) were known to have a history of treatment for a mental health or substance abuse problem.

Introduction

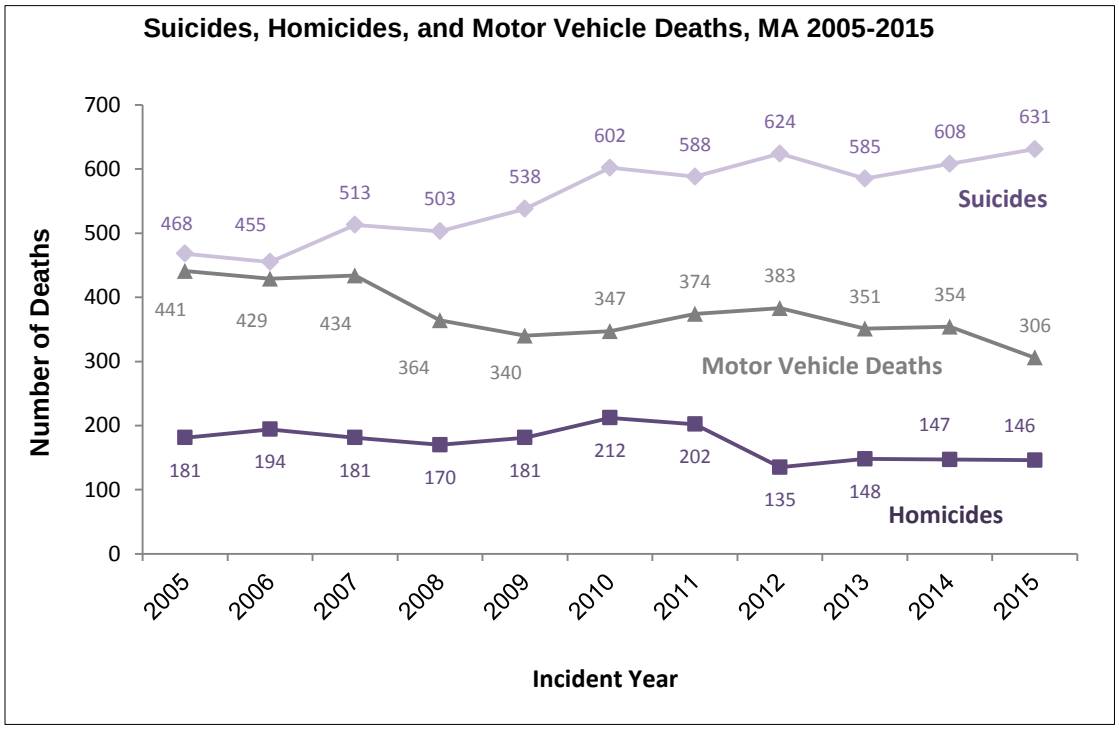
In 2014, the Legislature passed Chapter 284 of the Acts of 2014: An Act to reduce gun violence. This law included a requirement for the Massachusetts Department of Public Health (DPH) to collect, record and analyze data on all suicides in the Commonwealth.

The Massachusetts Violent Death Reporting System (MAVDRS) began collecting data on all homicides, suicides, deaths of undetermined intent, unintentional firearm deaths and legal intervention deaths that occurred in the Commonwealth starting in 2003. MAVDRS is a part of the National Violent Death Reporting System (NVDRS) and is funded by the Centers for Disease Control and Prevention (CDC). The software, variables and coding guidance are standardized by CDC across all funded states. The data contained in this report is for 2015, the latest year available. Due to the extensive information collected, CDC allows eighteen months after the end of the data year for data completion.

Since the passage of Chapter 284 of the Acts of 2014, MAVDRS has worked towards obtaining better data on all of the information specified in the legislation. MAVDRS has been working with current data partners, which include the Registry of Vital Records and Statistics (RVRS), the Office of the Chief Medical Examiner (OCME), the Massachusetts State Police (MSP), and the Boston Police Department (BPD), as well as new partners within the Executive Office of Public Safety and Security (EOPSS) like the Department of Criminal Justice Information Services (DCJIS), to work on obtaining additional data elements as well as improving upon the quality of data currently collected. MAVDRS received data for 2015 firearm suicides from DCJIS that has been used to improve the reporting on information related to firearm suicides.

Suicide Data 2015

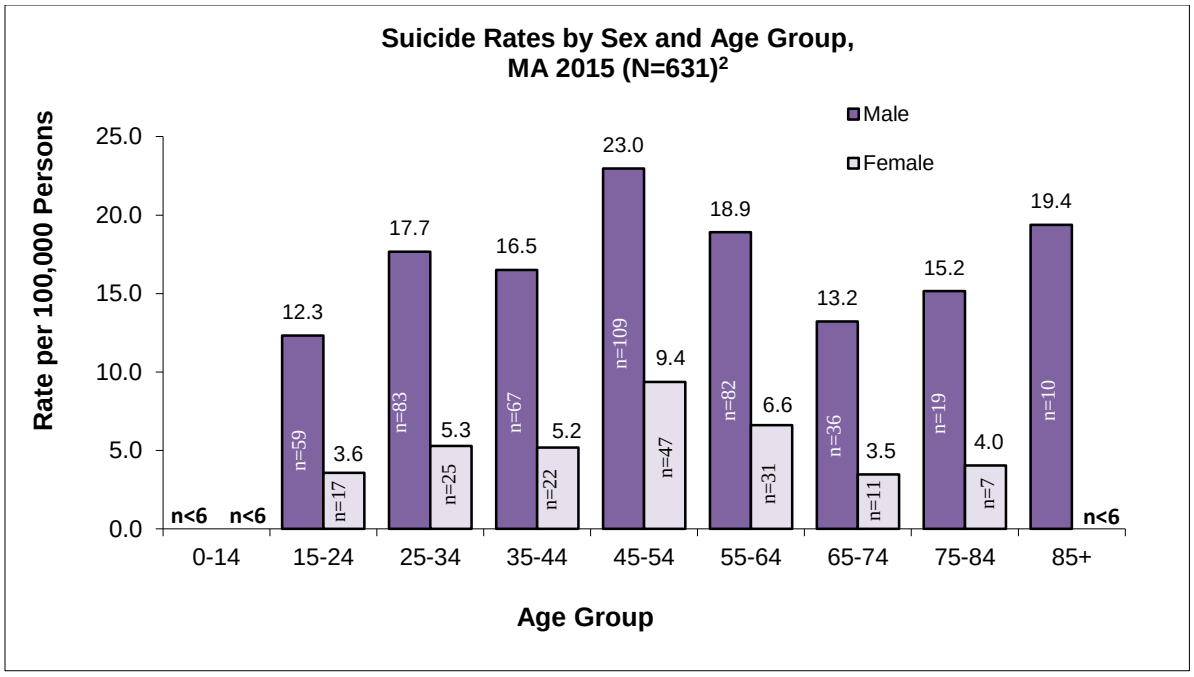
From January 1, 2015 to December 31, 2015, there were 631 suicides (9.3/100,000) that occurred in the Commonwealth of Massachusetts. Of the 631 suicide deaths, 468 of the victims were male (14.2/100,000, 74%) and 163 victims were female (4.7/100,000, 26%).



Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health; Fatality Analysis Reporting System (FARS), National Highway Traffic Safety Administration

- The number of suicide deaths was two times higher than the number of motor vehicle traffic-related deaths (N=306) and four times higher than homicides (N=146) in 2015.
- Massachusetts has a lower rate of suicide (9.3/100,000) compared to the rest of the U.S. The age-adjusted rate of suicide for the U.S in 2015 was 13.3/100,000. [1]
- Since 2005, suicide rates increased an average of 2.6% per year. There were approximately 35% more suicides in 2015 than in 2005. This increase mirrors an increase in the U.S. age-adjusted suicide rate, which increased an average of 2% per year since 2005. [1]
- While the majority of deaths by suicide occurred in males, there have been steady increases in the rates of suicide among men and among women between 2005 and 2015. The rate of suicide among males increased by 26%; among females, the rate increased by 34%.

[1] Source: Centers for Disease Control and Prevention, WISQARS – Fatal Injuries Report, 1999-2015, for National, Regional, and States

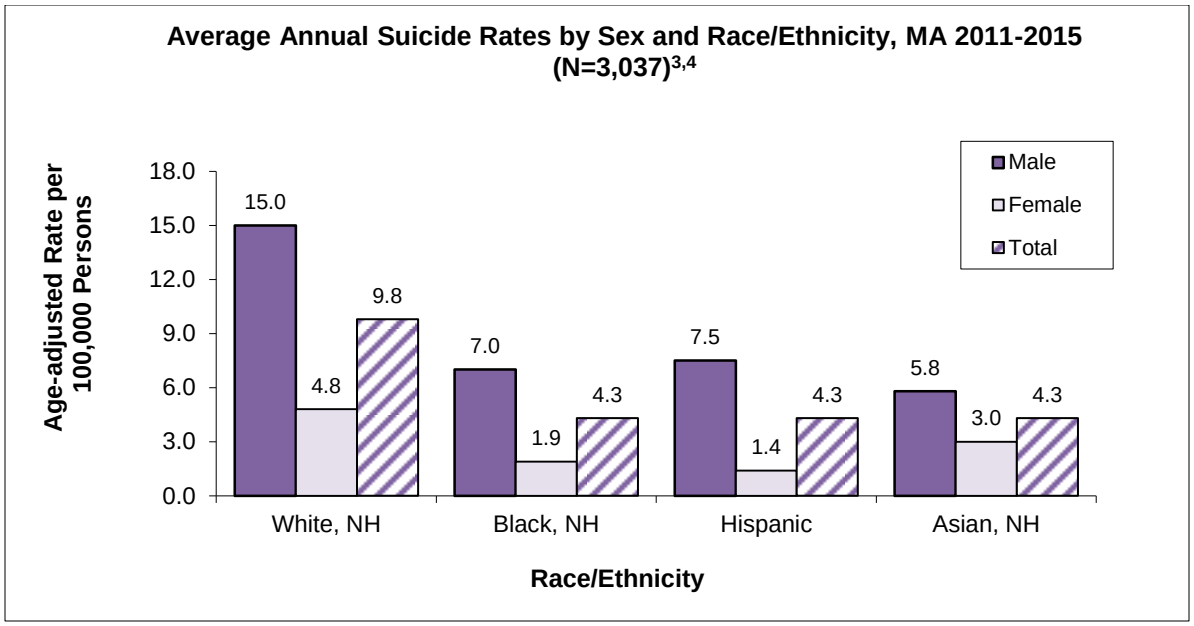


Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

- 43% of suicides that occurred in 2015 were among individuals age 45-64 years (n=269). Between 2005 and 2015, the rate of suicides in this group increased an average of 3.3% per year.

- The age group with the highest rate of suicide among both males and females was individuals age 45-54 years (males = 23.0/100,000 persons, n=109; females = 9.4/100,000 persons, n=47).

[2] Rates are not calculated for counts less than 6.



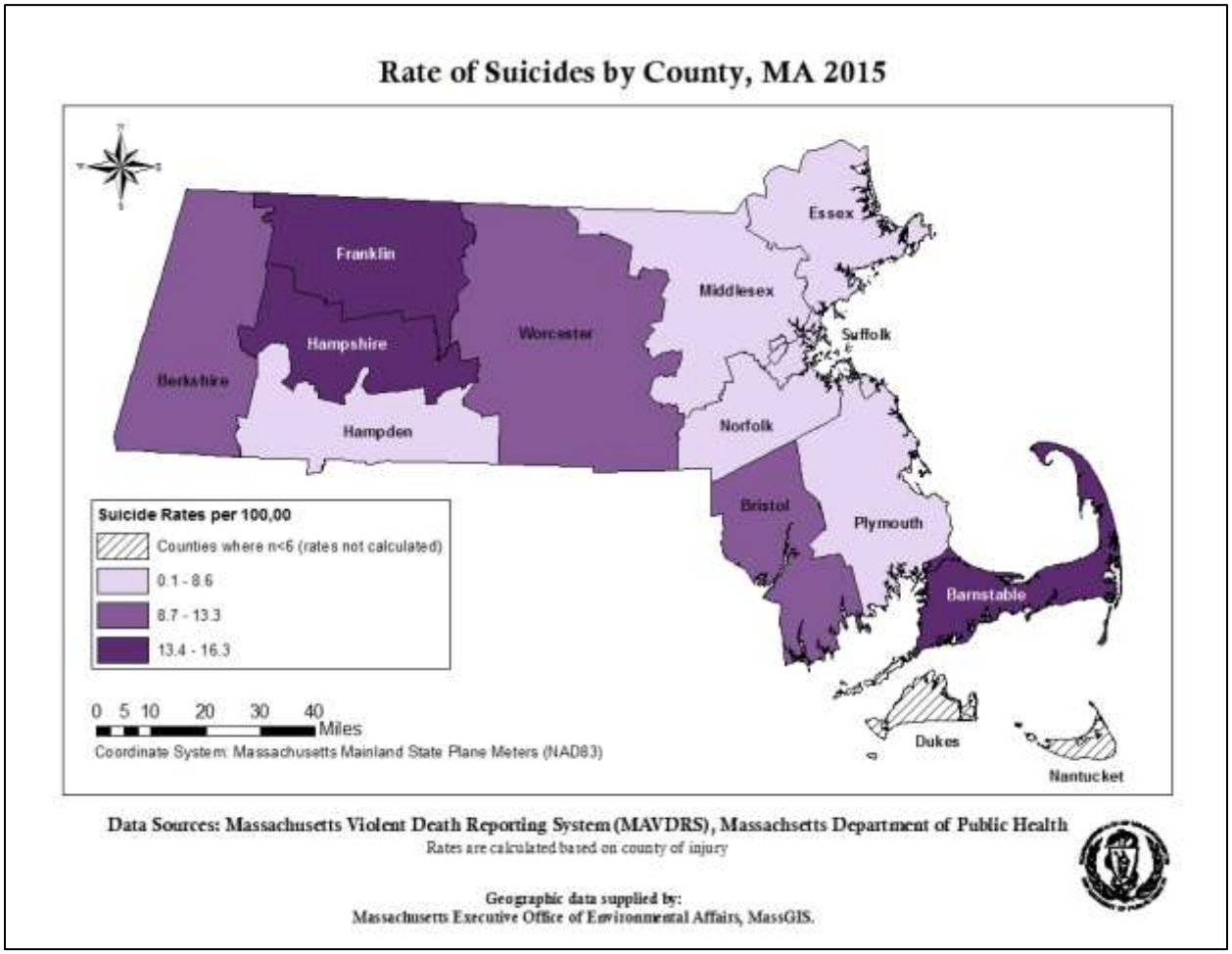
- For 2011-2015, the average annual age-adjusted suicide rate was highest among white, non-Hispanic males (15.0/100,000 persons, n=1,986).

- Similarly, white, non-Hispanic females had a higher average annual age-adjusted rate (4.8/100,000 persons, n=673) of suicide compared to black, non-Hispanic and Hispanic females.

[3] Rates are age-adjusted using the Standard US Census 2000 population. The five most recent years of data were used to improve the stability of the rate.

[4] Total n includes 34 suicides for whom race/ethnicity was American Indian/Alaska Native, Pacific Islander, other race or unknown. Rates were not calculated for these groups due to numbers less than six or lack of denominator information.

Suicides by County[5]

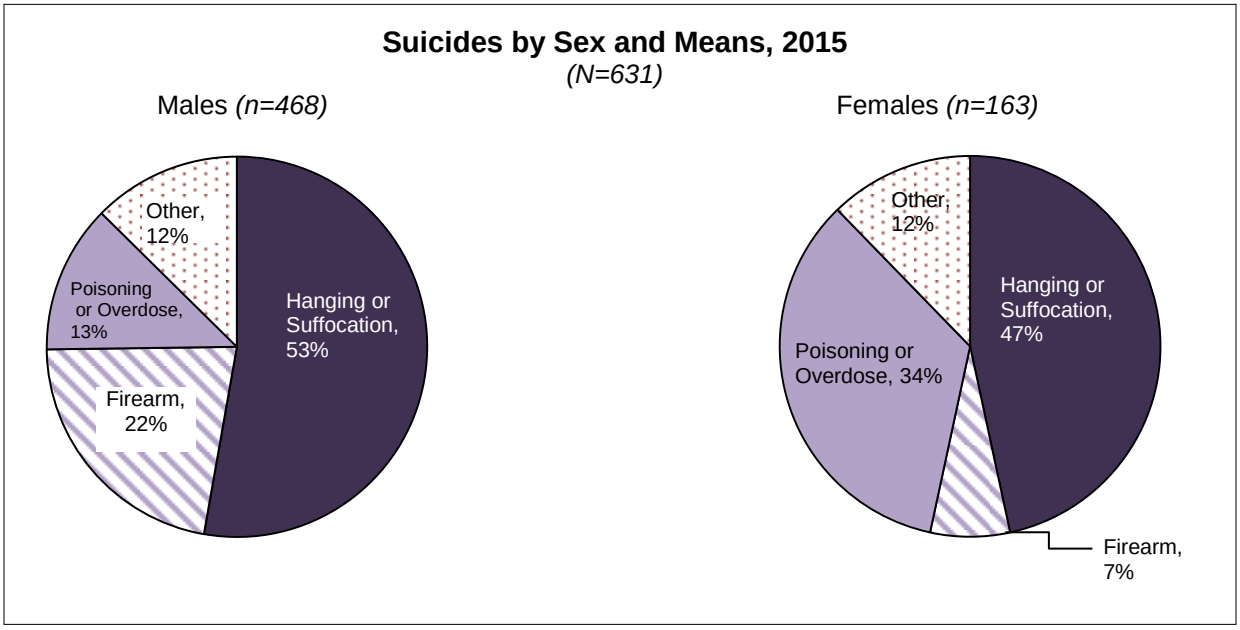


- In 2015, Barnstable county had the highest rate of suicide (16.3/100,000, n=35) and Middlesex county had the highest number of suicides (n=125, 7.9/100,000).
- The county with the lowest measurable rate in 2015 was Suffolk County (6.6/100,000, n= 51).

[5] Rates are calculated based on county of injury.

The Means of Suicide and Source of the Means of Suicide

Chapter 111 M.G.L, Section 232, (i) and (ii) specify that this report contain both the means of the suicide (e.g., firearm suicides) and the source of the means (e.g., type of firearm). The means used in suicides varies greatly as does its source. The following information represents the data currently available on the type and source of means used in suicides in Massachusetts in 2015.



Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

Means of Suicide: Number, Percent and Rate, MA 2015									
	Male			Female			Total		
Means of Suicide	**n**	**Percent**	**Rate per 100,000**	**n**	**Percent**	**Rate per 100,000**	**n**	**Percent**	**Rate per 100,000**
Hanging/Suffocation	247	52.8	7.6	76	46.6	2.2	323	51.2	4.8
Firearm	103	22.0	3.1	11	6.7	0.3	114	18.1	1.7
Poisoning/overdose	59	12.6	1.8	56	34.4	1.6	115	18.2	1.7
Sharp Instrument	18	3.8	0.6	5	3.1	--	23	3.6	0.3
Fall	17	3.6	0.5	4	2.5	--	21	3.3	0.3
Other Means	24	5.1	0.7	11	6.7	0.3	35	5.5	0.5
Total	**468**	**100.0**	**14.3**	**163**	**100.0**	**4.7**	**631**	**100.0**	**9.3**

Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

- The most prevalent methods of suicide in 2015 were hanging/suffocation (n=323, 51.2%), poisoning/overdose (n=115, 18.2%), and firearm (n=114, 18.1%).
- Hanging/suffocation (n=247) and firearm (n=103) were the most common methods for males.
- Hanging/suffocation (n=76) and poisoning/overdose (n=56) were the most common methods for females.

Source of Means of Firearm Suicides: Number, MA 2015[6]		
Means	**n**	**%**
Firearm	**114**	**100.0**
Handgun	**85**	**74.6**
Semi-Automatic Pistol	*44*	
Revolver	*33*	
Other/Unknown Type	*8*	
Rifle	**11**	**9.6**
Bolt Action	*<6*	
Lever Action	*<6*	
Pump Action	*<6*	
Unknown Type	*<6*	
Shotgun	**16**	**14.0**
Bolt Action	*<6*	
Pump Action	*7*	
Single Shot	*<6*	
Double Barrel	*<6*	
Semi-Automatic	*<6*	
Unknown Type	*<6*	
Unknown	**2**	**1.8**

Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

- Massachusetts has a lower rate of firearm suicides compared to the rest of the U.S. In 2015, the rate for the U.S. was 6.9/100,000 compared to 1.7/100,000 for MA.
- There were three types of firearms used in firearm-related suicides in 2015: handguns, rifles, and shotguns.
- The most common amongst these types were handguns (n=85, 74.6%).
- The majority of victims who died from firearm-related suicides were male (n=103, 90.4%).

Source of Means of Hanging/Suffocation Suicides: Number, MA 2015[3]			
Means	**Male**	**Female**	**Total**
Hanging/Suffocation	**247**	**76**	**323**
Rope/Clothing Line	82	19	101
Belt/Strap	51	8	59
Cord/Cable/Wire	44	12	56
Plastic Bag/Plastic Bag + Gas	20	9	29
Sheet/Curtain	<20	<6	20
Dog Leash	<10	<6	11
Clothing/Shoelace	6	10	16
Other Specified Means	<6	<6	3
Not Specified	21	7	28

Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

- For suicides by hanging/suffocation, the most common known ligatures used were a rope/clothing line (n=101, 31.3%), belt/strap (n=59, 18.3%) and cord/cable/wire (n=56, 17.3%).
- For both men and women, the most common ligature used was a rope/clothing line (males: n=82, 32%, females: n=19, 25%).
- Twenty-nine victims used plastic bags as a means of suffocation, either alone or in conjunction with a gas such as helium or propane.

[6] Data suppressed for counts less than 6 for select variables. Some values greater than 6 have also been suppressed when it would allow for a value of less than 6 to be calculated.

Source of Means of Poisoning Suicides: Number, MA 2015[7] [8]			
Means	**Male**	**Female**	**Total**
Poisoning[1]			
Substance Classes	**102**	**128**	**230**
Alcohol	13	8	21
Anticonvulsant	<6	<10	8
Antidepressant	16	22	38
Antipsychotic	<6	<15	15
Barbiturates	<6	<6	<6
Benzodiazepines	7	17	24
Carbon Monoxide	<15	<6	18
Cocaine	<6	<6	<6
Opiate	22	18	40
Other Substance Class	21	37	58
Acetaminophen	*<6*	*<6*	*6*
Diphenhydramine	*<6*	*<10*	*11*
Other/Unknown Substance	*16*	*25*	*41*

Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

This table includes all substances listed in the cause of death for poisoning suicides by substance class.

- Opiates (n=40, 17%) and antidepressants (n=38, 17%) were the most common classes of substances used in poisoning suicides.

Source of Means of Sharp Instrument Suicides: Number, MA 2015[5]	
Means	**Total**
Sharp Instrument	**23**
Knife/Scalpel	14
Razor Blade/Box Cutter	<6
Other/Not Specified	<10

Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

- The most prevalent sharp instrument used in suicides was a knife/scalpel (n=14, 61%).

[7] The substances listed have been identified as the cause of death of victims (n=115); however, please note that more than one substance may be associated with a single suicide. Because these substances are not mutually exclusive, the total count will add up to more than the 115 victims who died from poisoning.

[8] Data suppressed for counts less than 6 for select variables. Some values greater than 6 have also been suppressed when it would allow for a value of less than 6 to be calculated.

Source of Means of Fall Suicides: Number, MA 2015[9]	
Means	**Total**
Fall	**21**
Residential Building/Dorm	11
Bridge	<6
Parking Garage	<6
Health Care Facility	<6

Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

- In 2015, residential buildings (n=11, 52%) were most often utilized in suicides resulting from falling/jumping from a height.

Source of Means of Other Suicides: Number, MA 2015[6]	
Means	**Total**
Other Means	**35**
Drowning	16
Fire/Burn	7
Train	6
Motor Vehicle	<6
Other/Unknown	<6

Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

- The most prevalent methods of suicide in the other category were those involving drowning (n=16, 46%) and fire/burn (n=7, 20%).

[9] Data suppressed for counts less than 6 for select variables. Some values greater than 6 have also been suppressed when it would allow for a value of less than 6 to be calculated.

The Relationship between the Owner of the Means and the Decedent

Relationship of Persons who Died by Firearm Suicide to Firearm Owner : Number and Percent, MA 2015		
Relationship	**N**	**%**
Firearm Suicides	**114**	**100.0**
Self	42	36.8
Family Member/Friend/Other Known Person	11	9.7
Unknown	61	53.5

Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

MAVDRS collects information on the relationship of the owner of a firearm to the decedent from police reports and medical examiner files. However, information on the relationship between the owner and decedent is not always clearly documented in these records. Additional information was obtained for this report from DCJIS to improve this information.

In 2015, of the 114 firearm suicides, 53 had documented information on the relationship of the firearm owner to the decedent. In 37% of suicides by firearm, it was known that the decedent was the owner of the firearm and in 10%, it was known that the owner of the firearm was a family member, friend or other known person.

For prescription drugs used in poisoning suicides, MAVDRS collects information on the relationship between the decedent and the person for whom the prescription medication was prescribed. In 2015, 66% of pharmaceutical drugs used in poisoning suicides were known to be prescribed to the decedent.

MAVDRS does not collect information on the relationship between the owner of the means and the decedent for the following means because these are commonly available and non-regulated objects: hanging/suffocation, sharps instruments, non-prescription drugs or falls.

The Length of Time between Purchase of the Means and the Death of the Decedent

Length of Time from Purchase of Firearm to Date of Death of Firearm Suicide where Victim was Gun Owner: Number and Percent, MA 2015		
Length of Time from Purchase to Death	**N**	**%**
Victim was Gun Owner	**42**	**100.0**
Less than 1 year	8	19.0
Between 1-5 years	8	19.0
Over 5 years	11	26.2
Unknown	15	35.7

Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

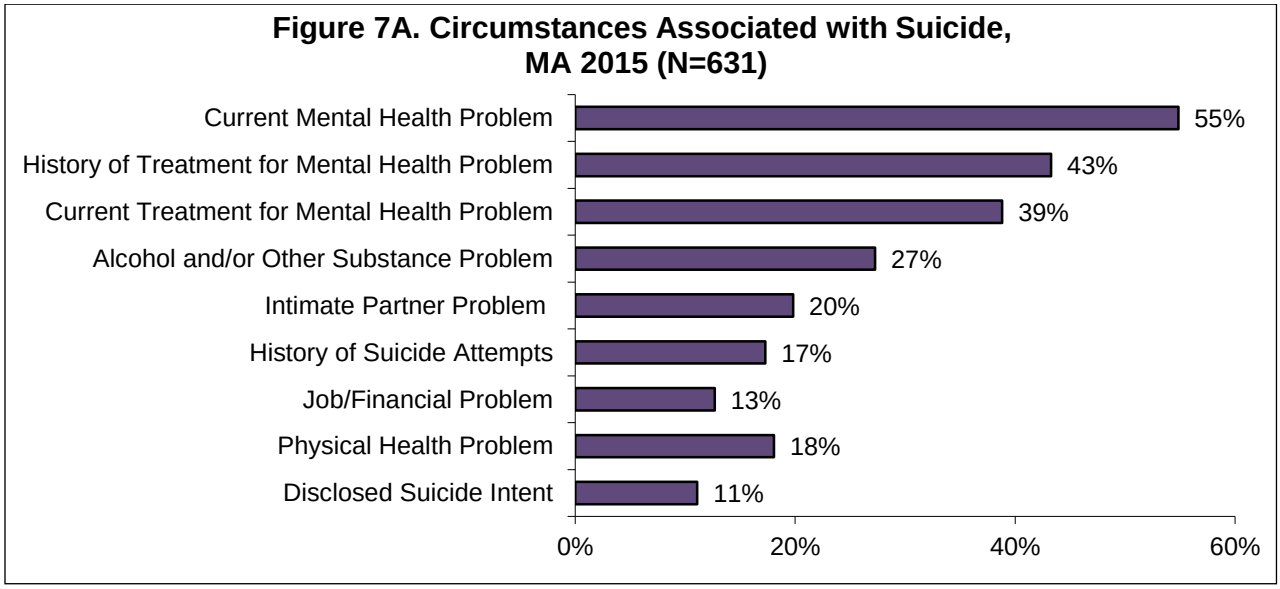
MAVDRS was able to obtain information on the length of time between the purchase of the means and the death of the decedent for firearm suicides where the victim was the owner of the firearm. Information on the length of time from purchase to death was known for 64% of firearm suicides where the victim owned the firearm. In 30% of these, the victim had owned the gun for less than a year and in 30% the victim had owned the firearm for between 1 and 5 years. In 41%, the victim had owned the firearm for over 5 years.

Whether the Means was Legally Obtained and Owned Pursuant to the Laws of the Commonwealth

Of the variety of means used in suicides, only those by firearm and poisoning may or may not be obtained and owned legally. For firearms, MAVDRS currently collects information on whether a firearm was known to be stolen, but this information is often incomplete. Of the 114 firearm suicides in 2015, none were known to be stolen. MAVDRS is working to improve on the completeness of this variable and determine whether or not a firearm was legally obtained and owned.

In 2015, there were less than six known illicit substances that were part of the cause of death in poisoning suicides. MAVDRS does not currently have a variable for capturing whether prescription drugs used in poisoning suicides were obtained legally or not. MAVDRS will continue to work with data partners to capture this information for future reports when possible.

Circumstances



Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

A circumstance is a condition, fact or event that affects a situation. Circumstances surrounding the decedent's life prior to the death can highlight opportunities for future prevention efforts. MAVDRS systematically collects information on suicides and allows for more than one circumstance to be listed for a suicide victim. 94% of suicide victims had at least one circumstance identified during case-review (n=592) and 84% had multiple circumstances known (n=528). It is important to remember that some circumstances are more likely to be known and documented than others and if a circumstance is not identified, that does not mean it was not present in the decedent's life. The above chart represents percentages of circumstances noted out of all suicides (N=631).

- 55% of suicide victims had a documented current mental health problem, such as depression, anxiety disorder, schizophrenia or post-traumatic stress disorder.

- 39% were currently receiving treatment for a mental health or substance abuse problem and 43% had any history of treatment for a mental health or substance abuse problem.

- 27% had a known alcohol or other substance use problem.

- 20% experienced an intimate partner problem prior to their death such as divorce, break-up, jealousy or conflict. In 2015 there were 4 intimate partner violence related homicide/suicide cases, 2 of which involved firearms.

- 17% had a known history of suicide attempts.

Past Suicide Attempts

Information on past suicide attempts is obtained from the medical examiner file and police reports. This information may come from the decedent's family, friends or psychiatric/hospital records. Friends and family of the decedent may not know of the decedent's past suicide attempts or may choose not to report that information to the authorities. Also, hospital records are not available on all suicides and even if they are present, not all suicide attempts would cause an injury that would make this information be present in the records.

Confirmed Past Suicide Attempts by Means Used in Suicide & Sex: Number & Percent, MA 2015			
	n	%	Total N
Firearm			
Male	<6	--	103
Female	<6	--	11
Total	<6	--	114
Hanging/Suffocation			
Male	39	16%	247
Female	26	34%	76
Total	65	20%	323
Poisoning			
Male	10	17%	59
Female	20	36%	56
Total	30	26%	115
All Other Means			
Male	8	14%	59
Female	<6	--	20
Total	<25	--	79

Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

- Thirty-one percent of female victims (n=51) and 12% of male victims (n=58) were confirmed to have prior suicide attempts.
- Thirty-six percent of female poisoning victims (n=20) and 34% of female hanging/suffocation victims (n=26) had prior suicide attempts.
- Sixteen percent of male hanging/suffocation victims (n=39) and 17% of male poisoning victims (n=10) had prior suicide attempts.

Past Mental Health Treatment of the Decedent

History of Treatment for Mental Health or Substance Abuse Problem: Number, MA 2015			
	n	%	Total N
Firearm			
Male	32	31%	103
Female	<6	--	11
Total	<40	--	114
Hanging/Suffocation			
Male	100	40%	247
Female	44	58%	76
Total	144	45%	323
Poisoning			
Male	27	46%	59
Female	38	68%	56
Total	65	57%	115
All Other Means			
Male	19	32%	59
Female	9	45%	20
Total	28	35%	79

Source: Massachusetts Violent Death Reporting System, Massachusetts Department of Public Health

- Fifty-eight percent of female victims (n=95) and 38% of male victims (n=178) were noted to have a history of treatment for a mental health or substance abuse problem.

Suicide Prevention Program

The Suicide Prevention Program (SPP) at DPH employs the latest suicide prevention strategies using the public health approach and is funded by a specific line item in the Massachusetts State budget. The SPP uses data to help inform its prevention strategies.

Massachusetts has one of the lowest suicide rates in the country. Factors that contribute to Massachusetts' low rate include: the Commonwealth's low rate of household gun ownership, better access to emergency medical care, a robust behavioral health system and a 10-year history of state suicide prevention funding.

A major public health strategy is to identify health disparities – when a disease, illness or injury disproportionately effects a particular population. Analyzing data on suicides and non-fatal self-injuries enables the SPP to identify at-risk populations and target funding to those populations. The SPP issued a competitive procurement for FY15 that resulted in the funding of 20 community-based providers to address the needs of these vulnerable populations statewide. Our providers and services fall into three distinct categories offering evidence-based strategies around suicide prevention, intervention and postvention as described below:

- Prevention:
    - Training – support the development of professional skills for mental health professionals; school personnel; community service providers and gatekeepers
    - Community Awareness Campaigns
    - Online and face-to-face screening and referral
    - Evidence based strategies targeting high risk populations – working aged men, LGBTQ, elders, veterans
- Intervention:
    - Support Groups for Attempt Survivors
    - Statewide Samaritans toll free helpline – funding provided to 4 Samaritans agencies
    - Evidence based trainings for clinicians around assessment skills for suicidality
- Postvention:
    - Loss Survivor and bereavement groups
    - Postvention services to schools/communities in the wake of a youth suicide

Through Inter-agency Service Agreements, the program funds activities specific to the populations served by the Executive Office of Elder Affairs, the Department of Mental Health and the Department of Veterans' Services' SAVE Program.

The SAVE Program (Statewide Advocacy for Veterans Empowerment) is composed of outreach workers who are returning veterans or family members of returning veterans who reach out to military personnel coming back from Iraq and Afghanistan to educate them on services and benefits available to them, and to screen for behavioral health issues. They are highly mobile and attend veterans' gatherings all across the state. SAVE is not restricted to working only with

returning veterans. They can serve any veteran. Despite the age differences when dealing with Viet Nam war veterans, for example, they still command credibility because of their military service.

The SPP works in partnership with these agencies as well as the Department of Elementary and Secondary Education, the Department of Corrections, our own Bureau of Substance Addiction Services, the Office of Emergency Services, Department of Children and Families, Department of Youth Services, County Sheriff's Departments, and the MA National Guard. An especially significant and close partner is the Department of Mental Health which provides senior management staff participation in all aspects of the Program.

The SPP also funds the statewide MA Coalition for Suicide Prevention and its prevention activities. The Coalition develops and supports ten Regional Coalitions covering the entire Commonwealth. The Regional Coalitions provide the local networking to assure that prevention services reach all areas of the Commonwealth.

Community Coalitions are given technical assistance and some Program funding in their initial stages to support their development. Some coalitions, like Needham, Newton, Nantucket and New Bedford, for example, were formed in response to one or more youth suicides. After a year or two of operation, these coalitions usually expand to include activities addressing suicide across the lifespan.

A primary strategy for preventing suicide is raising public awareness that suicide is preventable. Gatekeeper training teaches everyone how to recognize signs of suicide and instills confidence in talking about suicide.

Behavioral health professionals, until very recently, received little education in assessing and managing suicide risk despite the fact that they inevitably served clients with suicidality. Skills training for clinicians fill that gap.

Education and screening training for health professionals helps them to identify at risk individuals in their practices.

We prefer to introduce system-wide approaches to suicide that include appropriate levels of training, protocols to follow and postvention strategies to minimize further deaths if a suicide occurs. Schools, DYS, Community mental health centers and hospital systems are some examples of systems with which we are working.

Last April, 500 participants attended each of the two days of our annual conference. Participants were from clinical settings, schools, law enforcement, policy makers, survivors, attempters and service providers.

The SPP also provides technical assistance to interagency prevention policy initiatives to assure that the most current suicide prevention strategies are employed.

Conclusion

Suicide is a major public health problem and Massachusetts needs to collect data on these deaths to better inform prevention efforts. Suicides have been tracked in the Massachusetts Violent Death Reporting System since 2003 and have been increasing. Suicides have been increasing for both sexes, although males have a higher rate and make up about 74% of suicides. 43% of suicides occurred in persons ages 45-64 in 2015. The means most commonly used in suicides are hanging/suffocation (51%), poisoning/overdose (18%), and firearm (18%). For suicides by hanging, rope/clothing line was the most common ligature (32%). For suicide by firearm, handguns (75%) were the most common type of firearm used. For suicides by poisoning, opiates (18%) and antidepressants (16%) were the most common class of substance used. 17% of suicide victims had made a prior suicide attempt. 43% had a history of treatment for a mental health or substance abuse problem.

MAVDRS will continue working with other data partners on capturing additional data required by the legislature and improving data quality of existing data fields.

The Suicide Prevention Program at DPH frequently uses all of the data available at DPH, including MAVDRS, to help inform its ongoing prevention efforts and new strategies. This data helps the Program target efforts towards populations with the greatest need.